

Exhibit C.1
Substantive Water Quality Requirements

A. No Impairment of Water Quality:

- A1. The Powder Mill Creek is classified as Class A waters of the state. Turbidity in Class A waters shall not exceed 5 NTU over background when the background turbidity is 50 NTU or less, or have more than a 10 percent increase in turbidity when the background turbidity is more than 50 NTU.
- A.2 The discharge or release of oil or petroleum hydrocarbons into or on the surface of state waters is prohibited. If a visible oil sheen is observed beyond the limits of the construction activity then all appropriate actions to stop, contain, and cleanup the oil shall be taken.
- A.3. The Washington Sediment Management Standards are water quality standards pursuant to the federal Clean Water Act. Sediments downstream of the construction activity shall not be contaminated by waste and other materials and substances or reduce the existing sediment quality, except in those instances where: (1) All wastes and other materials and substances that may contaminate such sediments are provided with all known, available and reasonable methods of prevention, control, and treatment and best management practices; and (2) Existing beneficial uses are maintained and protected.

B. Notification

- B1. The Boeing Company shall provide notice to Ecology's Dean Yasuda at least 3 days prior to the start of construction and within 14-calendar days after completion of the PCB-sediment removal and creek restoration work and within 14-calendar days after the completion of the replanting work; both tasks as described in the approved Engineering Design Report-Powder Mill Creek Sediment Removal Interim Action. Notification can take place by e-mail to dyas461@ecy.wa.gov or, telephone to (425) 649-7264, but shall be followed in writing immediately afterwards.

C. Construction, Excavation, and Grading

- C1. Removal of contaminated soils, sediment, groundwater and surface water as generated during the site setup, creek bed excavation, creek restoration activities, and site demobilization shall meet the provisions of this 3rd Agreed Order Modification and the Model Toxics Control Act (Chapter 173-340 WAC), as referenced, before final restoration is completed.
- C2. Construction water and dewatering water both from upland and in-water excavation shall not be discharged to surface water or to the stormwater system. "In-water construction" is defined as all work below the ordinary high water mark of Powder Mill Creek.
- C3. Wash water containing oils, grease, or other hazardous materials resulting from wash down of equipment or working areas shall be contained for proper disposal or treatment and shall not be directly discharged into state waters, storm drains, or any part of the stormwater system.
- C4. Fuel hoses, oil drums, oil or fuel transfer valves and fittings, and all other equipment, shall be checked daily for drips or leaks, and shall be maintained and stored properly to prevent spills into state waters. No refueling of equipment shall occur over, or within 50 feet of Powder Mill Creek.
- C5. Equipment used for this project shall be free, to the maximum extent possible, of external petroleum-based products.
- C6. A qualified and registered professional engineer and a qualified ecologist shall be on site as necessary to oversee project construction and a qualified ecologist shall be on site to oversee riparian planting.
- C7. All disturbed riparian areas shall be protected from erosion using vegetation or other means.

D. In-water Construction

- D1. WAC 173-201A-110(3) allows a 100 foot mixing zone in rivers when flow is less than 10 cfs for temporary exceedances of the turbidity standards during and immediately after necessary in-water or shoreline construction activities that result in the disturbance of in-place sediments. These requirements do not authorize a mixing zone greater than that described in WAC 173-201A-110(3). The Applicant shall fully apply all known, available, and reasonable methods of prevention, control, and treatment (AKART).
- D2. Timing Limitations: Excavation of the contaminated sediments and soils within the project area shall occur between July 1 and October 15, 2006. These dates are subject to change with prior approval of the Washington State Department of Ecology, and the Washington Department of Fish and Wildlife.

- D3. If at any time as a result of project activities fish are observed in distress, a fish kill occurs, or water quality problems develop (including equipment leaks or spills) operations shall cease and the following agencies shall be contacted: Ecology's 24-Hour Spill Response Team at (425) 649-7000; Department of Ecology at (425) 649-7264, Dean Yasuda; and Washington Department of Fish and Wildlife (WDFW) at (360) 534-8233. Work shall not resume until further approval is given by WDFW and the Department of Ecology.
- D4. Fish habitat components and bank protection material shall be installed to the standards required by the Washington Department of Fish and Wildlife provisions in its December 7, 2005 letter to URS Corporation, Michael Meyers and as described in the approved Engineering Design Report-Powder Mill Creek Sediment Removal Interim Action as referenced in the Agreed Order.
- D5. All groundwater seepage from the sediment, construction water, surface water or other miscellaneous water in the in-stream work area will be completely collected and removed using the collection sump and pump to be installed directly upstream of the decant weir, or other means as necessary. The pumping work will be conducted in accordance with the approved Engineering Design Report Powder Mill Creek Sediment Removal Interim Action as referenced in the Agreed Order.

D6. **Water Quality Monitoring:**

An in-water construction Water Quality Monitoring Plan shall be developed and implemented. "In-water construction" is defined as all work below the ordinary high water mark of Powder Mill Creek. The Water Quality Monitoring Plan shall be submitted to Ecology for review and approval as part of the approved Engineering Design Report-Powder Mill Creek Sediment Removal Interim Action. Ecology may require changes and modifications to the plans if Ecology becomes aware of significant information that makes the current sampling unable to meet the water quality monitoring objectives. The plan shall include the following minimum requirements:

- a. Location of samples: Samples shall be collected 100 feet downstream from the decant weir (or approximately 220 feet from the stilling basin). Background samples for turbidity shall be collected prior to the start of daily in stream work activities and outside the area of influence of the in-water work (at the 100-foot downstream sampling station). In addition, in order to monitor and assess the performance of the downstream weir for sediment source control purposes, Boeing shall collect at least one (1) grab water sample for PCB analysis daily immediately downstream of the decant weir (if surface water is present and in enough volume to sample at this location).
- b. Number of samples: Water quality monitoring samples for turbidity shall be collected a minimum of every two (2) hours throughout the first day of in-water construction activity if there is water upstream or anywhere within 100 feet

downstream of the decant weir. Sampling for turbidity shall be a minimum of three (3) times per day during in-water activity if no exceedances are detected. If turbidity or PCB exceedances are observed or measured per D6e, Boeing will contact Ecology within 24 hours of determination to discuss whether increased sampling for turbidity and PCBs is appropriate.

- c. Parameters to be sampled: Monitoring and background water samples for turbidity measurement shall be sampled for this project under the conditions of D6a and D6b. Water (grab) samples analyzed for PCBs shall be submitted for chemical analysis as soon as possible but no later than at the end of each work day with the analytical results reported to Ecology and Boeing using expedited 24-hour turn-around time.
- d. Equipment: Sampling for turbidity is to be accomplished using a turbidimeter properly calibrated according to the operator's manual.
- e. Detection of exceedances: Water quality standards for turbidity in Class A waters are as follows: turbidity shall not exceed 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or have more than a 10 percent increase in turbidity when the background turbidity is more than 50 NTU. If exceedances of this standard at the point of compliance specified in WAC 173-201A-110(3) and -040 (freshwater chronic and acute) are detected, as a result of water quality sampling and monitoring, The Boeing Company shall immediately take action to stop, contain, and prevent unauthorized discharges or otherwise stop the violation and correct the problem. Any exceedances shall be reported to Ecology within 24 hours of determination. After such an event, The Boeing Company shall assess the efficacy of the site Best Management Practices (BMPs), evaluate AKART (i.e., what can reasonably be done to enhance the performance of the weir or reduce mobilization of creek sediments) and update or improve the BMPs used at the work site in an effort to reduce or prevent recurrence of the turbidity exceedance.
- f. Reporting of results: Results of water quality monitoring shall be submitted by email to dyas461@ecy.wa.gov and followed up with signed written copies to Department of Ecology Project Manager Dean Yasuda, 3190 – 160th Avenue SE, Bellevue, WA, 98008-5452. If no exceedances are detected, results shall be submitted in writing to Ecology once a week. If exceedances are detected, results shall be submitted to Ecology within 24 hours of determination, and contingency measures and reporting shall be taken as required.

E. Stormwater Management:

- E1. The Boeing Company shall comply with the Stormwater Management Manual for Western Washington, February 2005 and the terms of the Agreed Order and all subsequent modifications and required work plans and reports.
- E2. During construction, The Boeing Company shall comply with all applicable stormwater requirements within the Stormwater General Permit for Construction Activity (NPDES Permit), if issued for this project, or meet the substantive requirements of such permit if the permit is not issued because less than 1.0 acre of land is cleared, graded, or excavated resulting in stormwater discharges to surface waters of the State.

- E3. Work in or near waters of the state shall be done so as to minimize turbidity, erosion, and other water quality impacts. Construction stormwater, sediment and erosion control Best Management Practices suitable to prevent exceedances of state water quality standards (e.g. silt fences, etc.), shall be in place before starting clearing, excavating, and grading work at the impact site.

F. Reporting and Monitoring:

- F1. **"As-Built" Report:** An "as-built" report documenting the final design of the restoration site shall be prepared when site construction and planting is completed. The report shall include, at a minimum, the following:
- Vicinity map showing site access;
 - Final site topography;
 - Drawings that shall clearly identify the boundaries of the site;
 - The installed planting scheme showing quantities, densities, sizes, and approximate locations of plants, as well as plant sources and the time of planting;
 - Photographs of the area taken from permanent reference points;
 - Locations of photopoints, sampling and monitoring sites;
 - An analysis of any changes to the plan that occurred during construction.
- a. A copy of the "as-built" report shall be sent to Department of Ecology, Project Manager: Dean Yasuda – 160th Avenue SE, Bellevue, WA, 98008-5452, as part of the interim action completion report, within 90 days of completing the plant installations, per the requirements of the Agreed Order and subsequent modifications.
- F2. Maintenance and monitoring shall occur as specified in the approved Engineering Design Report-Powder Mill Creek Sediment Removal Interim Action as referenced in the Agreed Order and subsequent modifications.
- F3. Installation of the project plantings shall be completed before November 30, 2006 as specified in the Agreed Order and subsequent modifications.
- F4. Project plantings shall be maintained and irrigated as necessary to ensure 80 percent or greater survival at the end of three (3) years.
- F5. Spring and fall inventories for invasive species shall be taken annually for the first three (3) years post-construction.
- F6. Invasive species shall be controlled such that they do not exceed more than 10% total cover at any time.

G. Emergency/Contingency Measures:

G1. In the event The Boeing Company is unable to comply with any of these conditions due to any cause, it shall:

- Immediately take action to stop, contain, and clean up unauthorized discharges or otherwise stop the violation and correct the problem.
- Notify Ecology of the failure to comply. Spill events shall be reported immediately to Ecology's 24-Hour Spill Response Team at (425) 649-7000, and immediately to Ecology's Dean Yasuda at (425) 649-7264.
- Submit a detailed written report to Ecology within five (5) days that describes the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of any samples taken, and any other pertinent information.